26 March 2003

Status Report on Civil Works Activities
In the Great Lakes and Ohio River Division
FY 2004
Colonel William E. Ryan III, Acting Division Engineer

AREA OF RESPONSIBILITY

The Great Lakes and Ohio River Division (LRD) serves the water resources needs of all or parts of 17 states, covering approximately 335,000 square miles, with a population of 56 million. Implementation of the Civil Works program is conducted through seven district offices, located in Chicago, Illinois; Louisville, Kentucky; Detroit, Michigan; Buffalo, New York; Pittsburgh, Pennsylvania; Nashville, Tennessee; and Huntington, West Virginia. The Great Lakes and Ohio River Division Headquarters, located in Cincinnati, Ohio, provides management and oversight.

The division includes the U.S. portion of the Great Lakes watershed and St. Lawrence River and the Ohio River watershed. Flood damage reduction projects have prevented an estimated $17 billion in cumulative basin-wide flood damages. Over 900 megawatts of hydroelectric power capacity exist at 10 Corps hydroelectric power plants. An estimated 100 million visitors enjoyed recreation experiences at 129 Corps lakes and navigation pools in the region. Last year over 275 million tons of commodities were shipped through Corps operated lock facilities on the Ohio River and its navigable tributaries. Total annual commerce on the Great Lakes averages 188 million tons. Opportunities also are being explored to restore aquatic and upland ecosystems from the adverse effects of acid mine drainage, untreated sewage contamination, water-related urban pollution, and other human activities that modify the environment.

SUMMARY OF FY 2004 PROGRAM

The FY 2004 Federal Budget request includes $703.5 million for 21 studies, 24 construction projects and continued operation and maintenance of 162 projects plus inspection of completed works and protection of navigation activities. The FY 2004 program will enable the Great Lakes and Ohio River Division to continue the General Investigations and Construction, General programs and meet essential requirements for Operation and Maintenance activities.

The FY 2004 request is a decrease of $9.2 million from the tentative FY 2003 allocation. This reduction includes a decrease of $7.4 million in the General Investigation appropriation, a decrease of $21.6 million in the Construction, General appropriation, and an increase of $19.8 million in the Operation and Maintenance, General appropriation.

The FY 2004 budget request is detailed in the table below. Each appropriation category will be addressed in turn.

Comparison of FY 2002 Execution, FY 2003 Allocations, and FY 2004 Budget Request

APPROPRIATION CATEGORY	FY 2002 EXECUTION $ million	FY 2003 TENTATIVE ALLOCATION $ million	FY 2004 BUDGET REQUEST $ million
GI	$14.2	$16.1	$8.7
CG/IWTF *	357.2	352.1	330.5
O&M	348.5	344.5	364.3
TOTAL	$719.9	$712.7	$703.5

*** Includes funds from the Inland Waterways Trust Fund (IWTF**).

GENERAL INVESTIGATIONS

HIGHLIGHTS OF FY 2002, FY 2003

The Great Lakes and Ohio River Division expended $14.2 million for General Investigation in FY 2002. In FY 2003, $16.1 million is scheduled for expenditure.

BUDGET REQUEST FOR FY 2004

The **General Investigations** request of $8.7 million provides funds for 19 surveys and two preconstruction engineering and design (PED) projects.

	START	CONTINUE	COMPLETE	FY 2004 $
SURVEYS	0	16	3	$5.6 M
PRECONSTRUCTION ENGINEERING & DESIGN	0	1	1	3.1 M
TOTAL	0	17	4	$8.7 M

Navigation Studies

The FY 2004 budget contains $2,090,000 to continue two navigation studies (Ohio River Mainstem Systems Study and Great Lakes Navigation System).

Ohio River Mainstem Systems Study, KY, IL, IN, OH, PA and WV

The Ohio River Mainstem Systems Study area encompasses the 981-mile length of the Ohio River from Pittsburgh, PA, to the mouth near Cairo, IL. The existing Ohio River navigation system consists of 20 locks and dam structures, which will be reduced to 19 upon completion of Olmsted Locks and Dam currently under construction. The purpose of the Systems Study is to develop the optimum investment strategy for operation and maintenance, major maintenance, major rehabilitation, and new construction investments in the system. The study will result in an authorization document for near-term actions and a master plan for long-term improvements to the Ohio River navigation system. FY 2004 funds of $1,350,000 will be used to continue engineering, economic and environmental system analyses.

Great Lakes Navigation System, MI, IL, IN, MN, NY, OH, PA and WI

The Great Lakes together with the St. Lawrence Seaway provide a continuous 2,400-mile deep draft waterway that extends from the western end of Lake Superior to the Gulf of St. Lawrence. The U.S. portion includes 136 harbors of which 71 are commercial, seven locks, 138 miles of breakwater and jetties, and over 600 miles of 27-foot deep draft navigation channel. The Great Lakes Navigation Systems review will identify the factors and trends that affect the character of the existing system and project future trends. This will include an evaluation of present and future commodity flows and the external factors that affect them. It will also include a determination of the potential for national and regional economic development, environmental and institutional impacts with a view toward whether or not a detailed feasibility study should be undertaken. If the review determines that there is a Federal interest in capital improvements, a follow-on feasibility study would quantify system capacity constraints and corresponding modifications to improve overall efficiency. FY 2004 funds of $740,000 will be used to continue the reconnaissance phase

Flood Damage Prevention Studies

FY 2004 funding of $1,117,000 is requested to continue six flood damage prevention studies.

Des Plaines River, IL and WI (Phase II)

The Des Plaines River basin has a history of flooding, which has caused significant economic losses. The Feasibility Cost Sharing Agreement was executed on February 27, 2002. The FY 2004 budget request of $278,000 will be used to continue the feasibility study of those areas not addressed in Phase I.

Metropolitan Louisville, Mill Creek Basin, KY

The study area lies in the southwestern portion of Jefferson County and represents the fourth in a series of watershed studies of the Metropolitan Louisville area. There are nearly 3,300 homes and businesses with an estimated value in excess of $100 million that are subject to flooding from local streams. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2003. FY 2004 funds of $176,000 will be used to continue the feasibility study.

Metropolitan Louisville, Southwest, KY

The study area encompasses a drainage area of approximately 24 square miles in the western and southern sections of Louisville, KY. Flooding in March 1997 resulted in damage to 5,000 residential and commercial structures in the study area. The Feasibility Cost Sharing Agreement was executed in June 1999. FY 2004 funds of $225,000 will be used to continue the feasibility phase.

Western Lake Erie Basin, OH, MI, and IN

The Western Lake Erie basin lies within the three adjoining states of Ohio, Michigan, and Indiana. The study purpose is to develop measures to improve flood control, water quality, navigation, fish and wildlife habitat, and recreation in a comprehensive manner within the basin. FY 2004 funds of $130,000 will be used to initiate the feasibility phase.

Davidson County, Mill Creek Watershed, TN

Davidson County encompasses metropolitan Nashville, Tennessee. Flood damages in the Nashville area resulting from the May 1979 flood were estimated at $93,000,000 in 2000 dollars. Mill Creek is a major tributary of the Cumberland River in southeastern Davidson County and northwestern Williamson County. The Feasibility Cost Sharing Agreement is scheduled to be executed in June 2003. The FY 2004 budget amount of $243,000 will be used to continue the feasibility phase.

Little Kanawha River, WV

The study area encompasses 2,300 square miles in northwestern West Virginia. The Feasibility Cost Sharing Agreement is scheduled to be executed in July 2003. FY 2004 funds of $65,000 will be used to continue the feasibility phase.

Special Studies

FY 2004 funding of $2,348,000 is requested to continue eight special studies and complete three special studies.

Indiana Harbor, IN

The Indiana Harbor study area is located in northwest Indiana in the communities of Gary, East Chicago, and Hammond. The study area covers 15.4 river miles, including the Indiana portion of the Grand Calumet River (except an area to be cleaned up by United States Steel) and portions of the Lake George Canal and the Calumet Canal that are not part of the Federal navigation channel. The study will examine restoration or clean up of the area, which contains approximately two million cubic yards of highly contaminated sediments. The Feasibility Cost Sharing Agreement is scheduled to be executed in May 2003. The FY 2004 budget includes $150,000 to continue the feasibility phase.

Metropolitan Region of Louisville, Jefferson County, KY

The study area encompasses a drainage area of approximately 386 square miles in the Metropolitan Region of Louisville, KY, and extends over six counties in Indiana and Kentucky. The study will examine drainage and flood damage reduction efforts as well as restoration of natural floodplain values and other measures. A Feasibility Cost Sharing Agreement with the Louisville and Jefferson County Metropolitan Sewer District is scheduled to be executed in July 2003. FY 2004 funds of $200,000 will be used to continue the feasibility phase.

Buffalo River Environmental Dredging, NY

The Buffalo River is located at the eastern end of Lake Erie in Buffalo, NY. The study will consider the removal or remediation of contaminated sediments within the Buffalo River Area of Concern (AOC). The reconnaissance report, being prepared using O&M funds, is scheduled for completion in FY 2003. The Feasibility Cost Sharing Agreement is scheduled to be executed in September 2003. FY 2004 funds of $52,000 will be used to prepare the feasibility Project Management Plan.

Onondaga Lake, NY

Onondaga Lake, located at Syracuse, New York, is part of the New York State Barge Canal and Oswego River Systems. The FY 2004 budget request of $307,000 will be used continue to support the partnership established by WRDA 99. The purpose of the partnership is to seek remedies to the severe water quality problems of Onondaga Lake.

Columbus Metropolitan Area, Lower Big Darby Creek Basin Environmental Restoration, OH

The Columbus metropolitan statistical area is the third largest metropolitan area in the state and is experiencing significant growth. Rapid industrial and commercial growth and increased residential construction have caused hydrological changes and contributed to the increased runoff and frequency of flooding in the City of Columbus and surrounding area. The Feasibility Cost Sharing Agreement is scheduled to be executed in March 2003. FY 2004 funds of $365,000 will be used to continue work on the feasibility study.

Hocking River Basin Environmental Restoration, Monday Creek, OH

Monday Creek lies in the Hocking River watershed in Perry, Athens, Hocking and Morgan Counties, Ohio. Severe acid mine drainage problems occur and erosion from disturbed land areas have accelerated sedimentation and deposition of materials in the stream. The reconnaissance report recommended a study of Monday Creek to evaluate the applicability of various restoration solutions to the overall degradation of the ecosystem. The Feasibility Cost Sharing Agreement was executed on April 27, 2000. The FY 2004 funds of $40,000 will be used to complete the feasibility phase in February 2004.

Mahoning River Environmental Dredging, OH

The Mahoning River Basin covers approximately 1,132 square miles in northeastern Ohio and west central Pennsylvania. This study addresses measures for the removal and remediation of contaminated sediments from the river. The Eastgate Regional Council of Governments indicated their interest in sponsoring a study of the Ohio portion of the river, and a Feasibility Cost Sharing Agreement was executed in February 2002. FY 2004 funds of $450,000 will be used to continue the feasibility study.

Muskingum Basin System, Dillon Lake, OH

The Muskingum Basin study area encompasses 8,051 square miles in southeastern Ohio. Within the Muskingum Basin, the upper reaches of Dillon Lake are significantly impacted by sedimentation resulting in aquatic habitat degradation. The Ohio Department of Natural Resources indicated their interest in a feasibility study of Dillon Lake, and a Feasibility Cost Sharing Agreement was executed on April 9, 2002. FY 2004 funds of $357,000 will be used to complete the feasibility study in September 2004.

New River Basin, Claytor Lake State Park, VA

The Claytor Dam and Lake is a pump-storage hydropower project located on the New River near Radford, VA. The study will investigate measures to address the sedimentation problem in the reservoir. The Feasibility Cost Sharing Agreement is scheduled to be executed in October 2003. FY 2004 funds of $130,000 will be used to continue into the feasibility phase of the study.

Powell River Watershed, VA

The Powell River originates in southwest Virginia and flows across the Tennessee border where it empties into the Clinch River. The study will develop a watershed management plan, which will evaluate various measures to restore the stressed and damaged ecosystem. FY 2004 funds of $197,000 will be used to complete the feasibility study in September 2004.

Fox River Environmental Dredging, WI

The study area encompasses the Lower Fox River in Wisconsin, which is a 39-mile segment of the Fox River from Lake Winnebago to Green Bay Harbor. The ecosystem of the Fox River has been contaminated in a number of areas, and the study will examine the removal of contaminated sediments. The Wisconsin Department of Natural Resources indicated their interest in sponsoring the study and a Feasibility Cost Sharing Agreement was executed on September 27, 2002. FY 2004 funds totaling $100,000 will be used to continue the feasibility study.

PRECONSTRUCTION ENGINEERING AND DESIGN

The FY 2004 budget request includes $3,145,000 to continue one PED project, and complete one PED project.

Navigation

The FY 2004 budget request includes $2,895,000 for one navigation project.

Greenup Locks and Dam, KY and OH

Greenup Locks and Dam is located on the left descending bank of the Ohio River near Greenup, Kentucky, 341 miles downstream from Pittsburgh. The project includes a 600-foot extension of the existing auxiliary lock chamber resulting in a 110 by 1,200-foot chamber. Construction is estimated to cost $241.3 million. The project was authorized for construction under WRDA 2000. The FY 2004 budget request of $2,895,000 will be used to complete PED in September 2004.

Watershed / Ecosystem

The FY 2004 budget request includes $250,000 for one watershed/ecosystem project.

Ashtabula River Environmental Dredging, OH

The Ashtabula River is located on the south shore of Lake Erie, 59 miles east of Cleveland, Ohio. The PED project will develop plans for remediation of contaminated sediments in the Ashtabula River and Harbor system. Construction is estimated to cost $34.7 million. The FY 2004 budget request of $250,000 will be used to continue PED.

CONSTRUCTION, GENERAL

HIGHLIGHTS OF FY 2002, FY 2003

The Great Lakes and Ohio River Division expended $357.2 million for Construction General projects in FY 2002 against specifically authorized projects. Expenditures against the Continuing Authorities Program totaled an additional $27.7 million.

In FY 2003, $352.1 million is currently scheduled for expenditure on specifically authorized projects. Construction will be continued for navigation, flood damage reduction (structural and nonstructural), shoreline protection, beach nourishment, environmental restoration, dam safety, major rehabilitation (navigation and flood damage reduction), recreation and infrastructure improvements.

BUDGET REQUEST FOR FY 2004

In FY 2004, $330.5 million for the Construction General program will be used for 24 projects.

	NUMBER OF FY 2004 BUDGETED PROJECTS	FY 2004 BUDGET REQUEST ($000)
Navigation	8	$221.3 *
Shoreline Protection	2	24.6
Flood Damage Reduction	10	58.5
Dam Safety Assurance / Major Rehabilitation	3	25.6
Mitigation, Restoration, and Protection	1	0.5
Total	24	$330.5

- Includes $107.8 million from the Inland Waterways Trust Fund.

Navigation

Funds in the FY 2004 request will be used to continue eight navigation projects.

Olmsted Locks and Dam, Ohio River, IL, KY

Construction is underway on the Olmsted Locks and Dam which will replace the 66 year-old Locks and Dams 52 and 53 on the lower Ohio River. The $1.080 billion project, located near Olmsted, IL, will provide twin 110 by 1,200-foot locks and a dam with a navigable pass that will allow traffic to pass about 58 percent of the time without locking. FY 2004 funds of $73,000,000 will be used to complete approach wall construction, continue bulkhead construction, and initiate construction for downstream mooring cells, gate storage facility, and the dam. The project is currently 54 percent complete.

Indiana Harbor, IN (Confined Disposal Facility)

The FY 2004 budget of $5,700,000 will be used to continue design and construction of a Confined Disposal Facility (CDF) at Indiana Harbor, IN, to contain 4.8 million cubic yards of dredged material, which is unsuitable for open lake disposal. The total cost estimate for the project is $125 million.

Kentucky Lock, Tennessee River, KY

The Kentucky Lock and Dam is located at mile 22.4 on the Tennessee River near Grand Rivers, KY. The project provides for construction of a new 110 by 1,200-foot lock chamber, a new railroad bridge, and a new highway bridge. The total cost estimate for the project is $652 million. FY 2004 funds of $24,866,000 will be used to continue project design and construction. Construction is currently 14 percent complete.

McAlpine Locks and Dam, Ohio River, KY, IN

At McAlpine Locks and Dam, located on the Ohio River at Louisville, KY, the obsolete 110 by 600-foot auxiliary lock chamber will be replaced with a new 110 by 1,200-foot lock at an estimated cost of $338 million. The new lock will complement an existing lock to provide twin 1,200-foot locks for tow traffic. Construction is currently 25 percent complete. FY 2004 funds of $26,100,000 will be used to complete cofferdam construction and continue project design.

Locks and Dams 2, 3, and 4, Monongahela River, PA

Locks and Dams 2, 3 and 4, located between river miles 11.2 and 41.5 upstream of Pittsburgh, PA are the last of the old, undersized structures on the Monongahela River. Age, deterioration, structural instability, and undersized locks are diminishing system reliability, resulting in frequent and long interruptions of navigation. The project includes replacement of the existing Dam 2 with a new gated dam and rehabilitation of the auxiliary Lock 2 chamber floodway bulkhead structure; removal of Locks and Dam 3; and construction of new twin 84 by 720-foot locks at Locks and Dam 4. The total project cost is estimated at $750 million. The project is currently 30 percent complete. FY 2004 funds of $35,000,000 will be used to continue real estate acquisition, project construction, and continue design.

Marmet Locks and Dam, Kanawha River, WV

Marmet Locks and Dam project is located on the Kanawha River 68 miles upstream of its confluence with the Ohio River. An additional 110 by 800-foot lock chamber landward of the existing locks has been authorized for construction. A total of 216 real estate tracts will be acquired along with some 250 homes and businesses.
The total project cost is estimated at $333 million. Construction is currently 20 percent complete. The FY 2004 budget request of $52,154,000 will be used to complete real estate acquisition and relocations, continue lock construction and project design.

Robert C. Byrd Locks and Dam, Ohio River, WV, OH

The old locks at the Robert C. Byrd Locks and Dam on the Ohio River have been replaced with two new locks, 110 by 1,200 feet and 110 by 600 feet. The new locks became operational in January 1993. In addition to the new locks, the project includes rehabilitation of the existing roller gated dam originally constructed in 1937. Total project cost is estimated at $381 million. FY 2004 funds of $2,500,000 will continue dam rehabilitation and fish and wildlife mitigation activities. The project is currently 97 percent complete.

Winfield Locks and Dam, Kanawha River, WV

Modernization of Winfield Locks and Dam on the Kanawha River includes construction of an additional 110 by 800-foot lock chamber, located landward of the existing locks, and a 110-foot wide non-navigable gate bay. The total project cost is estimated at $235.9 million. FY 2004 funds of $2,000,000 will provide for design of mitigation features. The project is currently 99 percent complete.

Shoreline Protection

FY 2004 funds will continue work at two shoreline protection projects.

Chicago Shoreline, IL

The Chicago Shoreline, IL, project will provide shoreline protection for 11 miles of publicly owned shoreline within the City of Chicago. The total estimated project cost is $300 million. The FY 2004 budget request of $24,000,000 will be used to continue construction. Construction is currently 45 percent complete.

Presque Isle Peninsula, PA

Initial construction of the Presque Isle Peninsula project at Erie, PA, was completed in November 1992 consisting of a system of 55 offshore rubble mound breakwaters along the peninsula and placement of approximately one half million tons of beach sand fill. The project also includes a periodic nourishment program for 50 years. The estimated total project cost is $129.9 million. FY 2004 funds, $600,000, will be used to place the twelfth year of post-construction beach nourishment.

Flood Damage Reduction

Funds in the FY 2004 budget request will be used to continue construction of ten flood damage reduction projects.

McCook and Thornton Reservoirs, IL

The McCook and Thornton reservoir elements are part of the greater Chicago Tunnel and Reservoir Plan. The project area covers 341 square miles in the City of Chicago and 48 adjacent suburbs. An estimated 180,000 structures are subject to annual flooding. The total estimated project cost is $864 million. The FY 2004 funds of $18,000,000 will be used to continue engineering and design, and construction of the McCook project.

Indianapolis (North), IN

The Indianapolis (North) project includes construction of three miles of levee and floodwall on the east bank of the White River in Indianapolis. The total cost estimate for the project is $17.5 million. The project is currently 20 percent complete. FY 2004 funds of $2,600,000 will be used to continue construction.

Little Calumet River, IN

The Little Calumet River, IN, flood control project will provide flood protection to 8,600 residential structures in Gary, Griffith, Hammond, Highland, and Munster, IN. The $198 million project includes construction of 22 miles of urban levees and floodwalls along with pumping plant modifications, channel modification and structural floodproofing and removal. The FY 2004 budget request of $3,800,000 will be used to continue design and construction. Construction is currently 57 percent complete.

Ohio River Greenway Corridor, IN (Flood Control)

Features of the Ohio River Greenway, IN, project include construction of a vehicular parkway, pedestrian and multi-use paths, a bridge, and two levee cuts to provide access to the Ohio River in the vicinity of the local flood protection project which was constructed between 1937 and 1953. Construction is estimated to cost $35 million. The FY 2004 funds of $1,000,000 will be used to continue construction of the demonstration project at Clarksville, IN. Construction is currently 11 percent complete.

Metropolitan Louisville, Beargrass Creek, KY

The Beargrass Creek project is located in eastern Jefferson County in the suburbs of Louisville, KY. The project consists of construction of eight detention basins, channel improvements, and floodwall/levee on the South Fork of Beargrass Creek and Buechel Branch. The project will provide protection to 830 structures. The 100-year flood will be reduced by an average of 1.5 feet as a result of project implementation, which will result in 314 structures no longer being classified as located within the 100-year floodplain. The total project cost is $12.3 million. In FY2004, $1,400,000 will be used to continue construction. Construction is currently 20 percent complete.

Metropolitan Louisville, Pond Creek, KY

The Pond Creek project is located in southern Jefferson County, KY. The project consists of construction of detention basin storage and channel enlargement along approximately 2.4 miles of Pond Creek and 1.5 miles of a tributary (Northern Ditch). A 15-acre wetland environmental restoration component and a multipurpose maintenance road/hiking trail along the channel are also included in the project. The total project cost is $20.8 million. The project will result in approximately 1,600 structures no longer being classified as located within the 100-year floodplain. Additional structures will benefit from reduced frequency and depth of flooding. In FY 2004, $2,500,000 will be used to continue construction. Construction is currently 61 percent complete.

Metropolitan Region of Cincinnati, Duck Creek, OH

Duck Creek is located in the City of Cincinnati and the Village of Fairfax, OH. The $36.6 million flood control project consists of channel enlargement and relocation, levees, floodwalls, one pump station, and environmental mitigation. The completed project will provide 100-year level of protection to existing commercial, industrial and residential areas along Duck Creek. FY 2004 funds of $8,500,000 will be used to continue construction. Construction is currently 18 percent complete.

Mill Creek, OH

The project is located along a 17.5 mile reach of the Mill Creek in Hamilton County, OH. Much of the project is within the commercial and industrial heart of Cincinnati, Ohio. The project has a total estimated cost of $214.2 million and is currently 56 percent complete. FY 2004 funds include $3,900,000 to continue the General Reevaluation Report and complete work items necessary to convey operation and maintenance of Section 3 to the local sponsor.

West Columbus, OH

The $133.2 million West Columbus, OH, project consists of 7.2 miles of levee and floodwall, two new pump stations, modifications of two existing pump stations, and 14 gate closures. FY 2004 funds of $1,800,000 will be used to continue construction of levees and floodwalls. Construction is currently 90 percent complete.

Levisa and Tug Forks of the Big Sandy River and the Upper Cumberland River, WV, VA, KY (Section 202)
Grundy, VA Element of Section 202

The Grundy flood damage reduction project, located in southwestern Virginia in the upper reaches of the Levisa Fork basin, will be constructed in cooperation with a major highway relocation project by the Virginia Department of Transportation. Major features of the flood control project include a structural floodwall to protect the central business district, relocation of two schools and fire station, construction of a flood-safe commercial development site, and voluntary flood proofing and acquisition. FY 2004 funds of $15,000,000 will be used to continue land acquisition, relocations, voluntary floodproofing and acquisition, and construction of the Grundy subproject. The Grundy subproject is currently 37 percent complete.

Dam Safety Assurance and Major Rehabilitation

Funds in the FY 2004 request will be used to continue construction on two projects and complete one project.

Mississinewa Lake, IN (Major Rehabilitation)

The Mississinewa Lake is located in north central Indiana. The project was placed in operation in October 1967. Subsurface investigations revealed an 0.8 feet settlement of a portion of the dam. The dam is stable at this time; however, the settlement is continuing which may lead to possible dam failure. The rehabilitation project includes placement of a 2,600-foot long cutoff wall. The total cost of the project is estimated at $55 million. FY 2004 funds of $21,000,000 will be used to continue construction. The project is currently 32 percent complete.

Dewey Lake, KY (Dam Safety Assurance)

The Dewey Lake project includes raising the height of the dam by three feet and modifying the existing spillway to maintain design capacity and reduce the risk of dam failure. The total cost of the project modification is estimated at $28.9 million. FY 2004 funds of $1,946,000 will be used to complete construction. The project is currently 95 percent complete.

Bluestone Lake, WV (Dam Safety Assurance)

Bluestone Lake, WV, is located in southern West Virginia, in Summers County. The height of the dam is to be raised by 8 feet, a floodgate structure will be constructed, and the hydropower penstocks will be retrofitted with gates. The total cost of the project modification is estimated at $118 million. In FY 2004, $2,600,000 will be used to continue construction. The project is currently 20 percent complete.

Environmental Mitigation, Restoration, and Protection

Funds in the FY 2004 request will be used to complete one project.

Chicago Sanitary and Ship Canal Dispersal Barrier, IL

The project is located along the Chicago Sanitary and Ship Canal near Romeoville, Illinois in Cook County. The total cost of the project is estimated at $3.6 million. In FY 2004, $500,000 will be used to complete project monitoring and maintenance of this demonstration project. The project is currently 80 percent complete.

OPERATION AND MAINTENANCE, GENERAL

HIGHLIGHTS OF FY 2002, FY 2003

In FY 2002 the Great Lakes and Ohio River Division expended $348.5 million for Operation and Maintenance activities. Maintenance activities completed in FY 2002 included:

Delivery of the Henry M. Shreve derrick boat with a lifting capacity of 350-tons at a 100-foot radius. The Gate Assembly area at McAlpine Lock was completed. Repairs at Chickamauga Lock on the Tennessee River continue.

Repairs, which included miter gate, culvert valves and gate and gate machinery repairs at the following locks: Dashields, Montgomery, New Cumberland, Pike Island, Willow Island, Bellville, Greenup, Meldahl, Markland, Cannelton, JT Myers, Smithland, LD 52 on the Ohio River; Lock 4, Morgantown and Maxwell on the Monongahela River; London and Winfield on the Kanawha River; Cheatham Lock on the Cumberland River; Wheeler and Pickwick on the Tennessee River, and the Poe and MacArthur Lock on the St. Mary's River.

Dredging at the following harbors: Toledo, Cleveland, Sandusky, Ashtabula, Huron, Waukegan, Calumet, Michigan City, Duluth-Superior, Green Bay, Dunkirk, Fairport, Big Suamico, Grand Haven, Holland Harbor, Leland, Ontonagon, Pentwater, Port Wing, St. Joseph. Dredging operations were performed at the following Rivers: St. Mary's, St Claire, Detroit and Ohio. Dike, breakwater and Disposal site repairs at the following sites: Cleveland, Calumet, Burns, Chicago, St. Mary's, Sturgeon Bay, South Haven, Portage, and Sheboygan.

The FY 2003 funds allocation for the Operation and Maintenance program is $344.5 million.

Significant maintenance activities scheduled for FY 2003 include:

Repairs, which include miter gate, culvert valves and gate and gate machinery repairs at the following locks: Dashields, Newburgh, Meldahl, JT Myers, Pike Island, Greenup, Hannibal, Markland, LD 52, Emsworth, and Racine on the Ohio River; Lock 2 on the Green River, Lock 2 and Lock 4 on the Monongahela River; Marmet and Winfield on the Kanawha River; Wilson and Pickwick on the Tennessee River, and the Lock on the St. Mary's River.

Dredging at the following harbors: Toledo, Cleveland, Sandusky, Loran, Huron, Waukegan, Calumet, Michigan City, Duluth-Superior, Green Bay, Dunkirk, Fairport, Grand Haven, Holland Harbor, Leland, Ontonagon, Pentwater, Port Wing, St. Joseph. Dredging operations was performed at the following Rivers: St. Mary's, St Claire, Toussaint, Detroit and Ohio. Dike, breakwater and Disposal site repairs at the following sites: Cleveland, Ashtabula, Lorain, Port Clinton, Burns, Calumet, Chicago, Michigan City, Duluth-Superior, Ontonagon, Grand Haven, Sturgeon Bay, Kenosha, Saugatuck, Detroit, Lexington and Sheboygan.

BUDGET REQUEST FOR FY 2004

The FY 2004 budget request for the Operation and Maintenance, General program is $364.3 million. This includes $173.1 million for operations activities and $191.2 million for required maintenance of projects. The extent of our Operation and Maintenance budgeted activities are shown in the table below.

CATEGORY	NUMBER OF FY 2004 BUDGETED PROJECTS	FY 2004 BUDGET REQUEST ($000)
Navigation Channels and Harbors	91	$61,544
Navigation Locks, Dams And Canals	12	$144,266
Flood Control Reservoirs	72	$75,674
Flood Control Channels and Inspections	7 Channel projects plus inspection of completed works	$2,576
Multiple Purpose Power	10	$75,277
Protection of Navigation	Various Activities	$4,999
TOTAL	192	$364,336

The FY 2004 funding will not meet the high priority requirements for the operation and maintenance of Corps projects. The aging projects continue to deteriorate due to unfunded maintenance. The funding for both operations activities and maintenance activities represents an increase of $19,835,000 relative to FY 2003 funding levels.

Navigation

The FY 2004 program request includes $205.8 million for 103 projects whose primary function is navigation.

Four of the Cumberland River multiple purpose projects as well as the St. Marys River multiple purpose project include navigation locks. The overall navigation responsibilities include: 96 lock facilities with 136 lock chambers; a total of 2,582 miles of inland navigation waterways on the Ohio River and its navigable tributaries; and 102 harbors in the Great Lakes region, of which 47 are deep draft harbors and 55 are shallow draft harbors. Waterborne commerce on the Ohio River and its navigable tributaries amounts to over 275 million tons, which is over one-third of the nation's waterborne commerce. Annual commerce on the Great Lakes averages 188 million tons, of which 86 million tons alone pass through the Soo Locks at the St. Marys River project.

The requested FY 2004 funding will provide for continued navigation on the Great Lakes and the Ohio River inland navigation system. FY 2004 funds will allow for much needed maintenance to major components of the navigation projects.

The budget request also includes the Protection of Navigation effort in the Great Lakes region, which encompasses Project Condition Surveys and the Surveillance of Northern Boundary Waters.

Flood Damage Reduction

The FY 2004 request includes $78.3 million for the operation and maintenance of 79 Corps projects whose primary purpose is flood control. These projects include 72 flood control reservoir projects and 7 flood control channel projects. The Muskingum River Lakes in Ohio include 14 of these flood control reservoir projects of which four, Bolivar, Dover, Mohawk and Mohicanville Dams, are used to impound water only when downstream flooding conditions are anticipated. Mt. Morris Dam is also a dry dam. In addition, seven of the Cumberland River multiple purpose projects include storage providing flood control benefits. The Tygart Lake navigation project in West Virginia also includes storage providing flood control benefits.

Hydropower

FY 2004 funding of $75.3 million has been requested for the operation and maintenance requirements of ten Multiple Purpose Power projects. These projects encompass the major Corps hydropower generation facilities in our area of responsibility, and consist of nine projects in the Cumberland River Basin plus the St. Marys River project at Sault Ste. Marie, MI. Specific funding for the Hydropower Business function totals $28.1M. The nine Cumberland River plants have over 914 megawatts of total generating capacity and the Soo Locks plant at Sault Ste. Marie has 21 megawatts of capacity. In addition, the Corps has a small 300 kilowatt electric power plant at the Stonewall Jackson Lake flood control project in West Virginia. Non-Federal entities also operate

hydropower facilities at Corps project sites on the Allegheny, Kanawha, and Ohio Rivers, and at Youghiogheny Lake in Pennsylvania. The renewable nature of water resources makes hydropower an ideal supplemental energy resource.

Aging facilities and increasing demands are combining to create a significant and growing need to rehabilitate a majority of the Hydropower Facilities.

Environmental Stewardship

Corps water resource projects in our area of responsibility are geographically and ecologically diverse. Developmental pressures adjacent to project boundaries increasingly affect the environmental character of the projects and make management increasingly complex. In spite of increasing pressure, Corps projects continue to provide valuable habitat for a large number of wildlife and plant species, some of which are endangered or threatened. Cooperative partnerships have been developed with other Federal, state, and local private groups to manage these resources on a sustained basis. A total of 1.3 million acres of land and water and more than 16,000 miles of shoreline are managed.

During FY 2002, management activities were conducted at 43 different projects to implement the recovery plans of 13 different endangered species of flora and fauna. A total of 17,795 acres of mitigation land were managed to meet authorized requirements in the areas of fisheries, wildlife, and habitat management.

Recreation

Corps projects in the 17-state area of responsibility provided recreational opportunities for large segments of the public in 2002. Corps lakes, recreational boat harbors, harbors of refuge, locks and navigation structures located both inland and on the Great Lakes, and associated navigation pools continue to provide recreational opportunities for millions of Americans and foreign visitors.

During 2002, approximately 96 million visitors recreated a total of 635 million hours at inland Corps projects alone. Additionally, during FY 2002, more than 1.5 million visits were made to visitor centers and parks located on the Great Lakes. A very large, but undocumented, number of visits were made to more than 100 recreational boat harbors, harbors of refuge and navigational structures also located on the Great Lakes. Visitors expended more than $1.3 billion in local trip spending while engaged in recreational activities and more than 40,000 local jobs were associated with this activity. Aging facilities and increasing recreational demands are combining to create a significant and growing maintenance backlog that is presenting a challenge to be more efficient and to make greater use of cooperative efforts and volunteers. Preparations were made and are continuing in order to support and participate in Lewis and Clark Bicentennial Commemoration activities.

FORMERLY UTILIZED SITES REMEDIAL ACTION PROGRAM (FUSRAP)

ASHLAND 1, TONAWANDA, NY

FY 2003 funds are being used to complete excavation, initiate backfill and restoration of remediated areas for Ashland 1/Seaway D, and to initiate work plans for the remediation of Rattlesnake Creek. FY 2004 funds will be used to close out the remedial action, including completion of backfill and restoration of remediated areas for Ashland1/ Seaway D, and to complete work plans and initiate remedial action at Rattlesnake Creek. The completion schedule will depend upon overall funding constraints.

LINDE SITE, TONAWANDA, NY

FY 2003 funds are being used to continue soils remedial action, complete an Remedial Investigation/Feasibility Study and Proposed Plan for the groundwater operable unit, complete a Record of Decision (ROD) for the Building 14 operable unit, and complete an Remedial Investigation for the Tonawanda Landfill and Mudflats vicinity property. FY 2004 funds will be used to complete the remedial action of radioactive contaminated soils, initiate demolition of Building 14, and complete a ROD for groundwater. The completion schedule will depend upon overall funding constraints.

NIAGARA FALLS STORAGE SITE, NY

FY 2003 funds are being to perform background water sampling, complete the remedial investigation including a draft report, continue the feasibility study, and continue site maintenance and appropriate security. FY 2004 funds will be used to issue the final the remedial investigation report, complete the feasibility study, including any needed feasibility studies, prepare a Proposed Plan, begin demolition of Building 401, remove palletized waste stored next to Building 401, and continue site maintenance and appropriate security. The completion schedule will depend upon cleanup standards established for this site and overall funding constraints.

SEAWAY SITE, TONAWANDA, NY

FY 2003 funds are being used to complete a Technical Memorandum on characterization of the Areas A, B and C, incorporate already available data regarding south-side areas that border the ongoing Ashland 1/Seaway D remediation and continue the Feasibility Study Addendum. FY 2004 funds will be used to complete the Feasibility Study Addendum, and to prepare a Proposed Plan and respond to comments. The completion schedule will depend upon cleanup standards established for this site and overall funding constraints.

LUCKEY, OH

FY 2003 funds are being used to complete the Feasibility Study addressing soils and ground water, complete public review of the Proposed Plan, and initiate response to comments on the Proposed Plan. FY 2004 funds will be used to finalize response to comments on the Proposed Plan, and complete a Record of Decision. The completion schedule will depend upon cleanup standards established for this site and overall funding constraints.

PAINESVILLE, OH

FY 2003 funds are being used to complete the Remedial Investigation and Feasibility Study, coordinate the final cleanup criteria, complete the Proposed Plan, and complete the Record of Decision. FY 2004 funds will be used to develop the remedial design, and initiate and complete remedial action for the site.

HARSHAW SITE, OH

FY 2003 funds are being used to continue the Remedial Investigation and initiate the Feasibility Study, and initiate a Potentially Responsible Parties (PRP) investigation. FY 2004 funds will be used to continue the Remedial Investigation and the Feasibility Study and complete the PRP investigation. The completion schedule will depend upon cleanup standards established for this site and overall funding constraints.

SHALLOW LAND DISPOSAL AREA, PA

In FY 2003 funds are being used to continue the Remedial Investigation. FY 2004 funds will be used to continue the Remedial Investigation and initiate the Feasibility Study. The project completion schedule is being determined.